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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,080	07/25/2003	Joachim Wolf	331.1048	3127
23280 7590 02/20/2007 DAVIDSON, DAVIDSON & KAPPEL, LLC 485 SEVENTH AVENUE, 14TH FLOOR NEW YORK, NY 10018			EXAMINER PICKARD, ALISON K	
			ART UNIT	PAPER NUMBER
			3673	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/627,080

Applicant(s)

WOLF ET AL.

Examiner

Alison K. Pickard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,9-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,9-13 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of Devers.

Baker discloses an axle boot comprising a joint housing 16 having plural radial recesses 16b and a bellows 12. The bellows is made of TPE and has an integral connecting collar 15 including a plurality of indentations projecting radially inward and adapted to recesses 16b (see Fig. 2 and col. 3, lines 62-65). A plurality of compensating pieces 22 is attached to an outer surface of the collar to form a cylindrical outer circumference for a clamp 23. The pieces are all connected and include ring sections (near 22) to connect adjacent pieces. The projecting portion of the pieces has a length corresponding to the recess.

Baker does not disclose ring sections wherein at least one ring section is elastically deformable, that the pieces are made of more than one material, or that the pieces have a web. Devers teaches an axle boot having a joint housing and bellows. Devers teaches a plurality of compensating pieces with the bellows. The pieces are connected as a single piece component having ring sections (near 32), wherein at least one is elastically deformable (see col. 4, line 12), which allows the component to be installed. Devers also teaches the compensating pieces include more than one material (i.e. insert 44 is a harder material than the rest of element 40). The pieces

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are a hollow (air-filled) body having flexible walls/ webs (e.g. Fig. 7). Devers teaches that this compensating component provides a more uniform stiffness and compression, thus providing a more uniform sealing and clamping force. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the compensating component of Baker with the unified component taught by Devers to provide a more uniform sealing and clamping force.

3. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '464.

JP '464 discloses a boot comprising a joint housing including an external contour with radial recesses. A bellows has a collar with plural indentations (e.g. 26) adapted to the recesses. A clamp 11 or 27 with integrated connecting pieces 28 or 14 is disposed around the collar to form a cylindrical outer surface. It is not clear if the pieces are connected to the collar via a rivet. The examiner takes Official Notice that it is well known to one of ordinary skill in the art to use a rivet as a means to connect two pieces. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use a rivet to connect the collar and piece with a rivet.

4. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '464 as applied to claim 13 above, and further in view of Devers.

Devers teaches an axle boot having a joint housing and bellows. Devers teaches a plurality of compensating pieces with the bellows. Devers also teaches the compensating pieces include more than one material (i.e. insert 44 is a harder material than the rest of element 40). The pieces are a hollow (air-filled) body having flexible walls/ webs (e.g. Fig. 7). Devers teaches that this compensating component provides a more uniform stiffness and compression,

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thus providing a more uniform sealing and clamping force. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the compensating pieces of JP '464 with the pieces taught by Devers to provide a more uniform sealing and clamping force.

***Allowable Subject Matter***

5. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

The problems with the prior art that Baker addresses relate to the disadvantages of the stiff materials used and to the large diameters the boots need. Baker solves this problem using a different material and by using the clamp on the outer surface of the boot, not between the boot and housing. Thus, Baker does not teach away from using an elastomeric deformable clamp. Applicant argues that Baker requires the collar pieces to be free to move. However, Baker also requires the pieces to be tack welded into place before being secured into place by the outer clamp 27. Once secured, the pieces will be fixed in place. using the elastic one-piece band of Devers will not affect the function of the overall boot of Baker. And, given that the band will be pliable, the pieces will still be able to move to a degree while still providing a uniform sealing and clamping force as taught by Devers. More importantly, it has been held that the use of one-piece construction is obvious. See *In re Larson* 144 USPQ 347, 348 (CCPA 1965).

Regarding the rejection of claims 13 and 15, the examiner notes that Applicant has not argued that it is well known to use a rivet as a means to connect two pieces. Thus, such is

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considered to be admitted prior art. Applicant does argue that the pieces do not appear to be rivetable or how rivets would be used. The examiner disagrees. Rivets are a common means to secure two elements with respect to one another and would provide fixed placement. It would be obvious to use a rivet with each piece 14 (or 28) to fix it in its proper place with respect to band 11. Attention is also directed to Fukumura '323, which shows an example of a rivet/projection 7 used to secure element 6 to element 1.

Figure 7 of Devers shows a radial web.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 571-272-7062. The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Alison K. Pickard  
Primary Examiner  
Art Unit 3673

AP